



## Material Safety Data Sheet

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**PRODUCT NAME:** 3M™ ESPE™ EXPRESS™ 2 ULTRA-LIGHT BODY QUICK REFILL

**MANUFACTURER:** 3M

**DIVISION:** 3M ESPE Dental Products

**ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

**EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)**

**Issue Date:** 10/31/14

**Supercedes Date:** 10/09/06

**Document Group:** 21-9871-1

### ID Number(s):

70-2011-2413-1

This product is a kit or a multipart product which consists of multiple, independently packaged components. An SDS for each of these components is included. Please do not separate the component SDSs from this cover page. The document numbers of the SDSs for components of this product are:

21-9846-3, 21-9847-1

### Revision Changes:

Kit: Component heading paragraph information was modified.

Page Heading: Product name information was modified.

Kit: Product name information was modified.

Kit initial issue message information was modified.

Section 1: Manufacturer name information was added.

Section 16: Disclaimer (first paragraph) information was added.

Section 16: Disclaimer (second paragraph) information was added.

Kit: ID Number Heading information was added.

Kit: ID Number(s) information was added.

Section 16: Web address information was added.

Section 1: Address information was added.

Copyright information was added.

Company logo information was added.

Telephone header information was added.

Company Telephone information was added.

Section 1: Emergency phone information information was added.

Company Logo information was deleted.

Copyright information was deleted.

Kit: Manufacturer's name information was deleted.

Kit: Emergency phone information information was deleted.

Kit: Disclaimer (first paragraph) information was deleted.

Kit: Disclaimer (second paragraph) information was deleted.

Kit: Address line 1 information was deleted.

Kit: Address line 2 information was deleted.

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**Document Group:** 21-9847-1 **Version Number:** 5.00  
**Issue Date:** 02/25/16 **Supercedes Date:** 10/09/14

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ ESPE™ EXPRESS™ 2 ULTRA-LIGHT BODY QUICK BASE

#### Product Identification Numbers

LE-F100-0273-6

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Dental Product, Dental impression material.

##### Restrictions on use

For use only by dental professionals.

#### 1.3. Supplier's details

**MANUFACTURER:** 3M  
**DIVISION:** Oral Care Solutions Division  
**ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA  
**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

#### 2.1. Hazard classification

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### 2.2. Label elements

##### Signal word

Not applicable.

##### Symbols

Not applicable.

**Pictograms**

Not applicable.

**2.3. Hazards not otherwise classified**

None.

**SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
VINYL POLYDIMETHYLSILOXANE	68083-19-2	40 - 50 Trade Secret *
CRISTOBALITE	14464-46-1	25 - 35 Trade Secret *
DIMETHYL METHYL HYDROGEN SILICONE FLUID	68037-59-2	10 - 15 Trade Secret *
POLY(DIMETHYLSILOXANE)	63148-62-9	1 - 10 Trade Secret *
SILANE TREATED SILICA	67762-90-7	1 - 10 Trade Secret *
POLYETHYLENE GLYCOL, SILOXANE TERMINATED	27306-78-1	< 2 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

**Skin Contact:**

Wash with soap and water. If signs/symptoms develop, get medical attention.

**Eye Contact:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

**If Swallowed:**

Rinse mouth. If you feel unwell, get medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**

See Section 11.1. Information on toxicological effects.

**4.3. Indication of any immediate medical attention and special treatment required**

Not applicable

**SECTION 5: Fire-fighting measures****5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

**5.2. Special hazards arising from the substance or mixture**

None inherent in this product.

**Hazardous Decomposition or By-Products**

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Irritant Vapors or Gases	During Combustion

### 5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Ventilate the area with fresh air. Observe precautions from other sections.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Dispose of collected material as soon as possible.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

### 7.2. Conditions for safe storage including any incompatibilities

Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidizing agents. Store away from amines.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
CRISTOBALITE	14464-46-1	ACGIH	TWA(respirable fraction):0.025 mg/m <sup>3</sup>	A2: Suspected human carcin.
CRISTOBALITE	14464-46-1	OSHA	TWA concentration(as total dust):0.15 mg/m <sup>3</sup> ;TWA concentration(respirable):0.05 mg/m <sup>3</sup> (1.2 millions of particles/cu. ft.)	
SILANE TREATED SILICA	67762-90-7	CMRG	CEIL:5 mg/m <sup>3</sup>	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

### 8.2. Exposure controls

**8.2.1. Engineering controls**

Use in a well-ventilated area.

**8.2.2. Personal protective equipment (PPE)****Eye/face protection**

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields

**Skin/hand protection**

See Section 7.1 for additional information on skin protection.

**Respiratory protection**

Respiratory protection is not required.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

General Physical Form:	Solid
Specific Physical Form:	Paste
Odor, Color, Grade:	Odorless, white paste
Odor threshold	<i>No Data Available</i>
pH	<i>Not Applicable</i>
Melting point	<i>No Data Available</i>
Boiling Point	<i>No Applicable</i>
Flash Point	Flash point > 93 °C (200 °F)
Evaporation rate	<i>No Applicable</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapor Pressure	<i>Not Applicable</i>
Vapor Density	<i>Not Applicable</i>
Density	1.2 g/ml
Specific Gravity	>=1.2 [Ref Std: WATER=1]
Solubility in Water	Nil
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>Not Applicable</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	<i>No Data Available</i>
Volatile Organic Compounds	<i>Not Applicable</i>
Percent volatile	<i>Not Applicable</i>
VOC Less H2O & Exempt Solvents	<i>Not Applicable</i>

**SECTION 10: Stability and reactivity****10.1. Reactivity**

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

**10.2. Chemical stability**

Stable.

#### **10.3. Possibility of hazardous reactions**

Hazardous polymerization will not occur.

#### **10.4. Conditions to avoid**

Heat

#### **10.5. Incompatible materials**

Amines

Strong acids

Strong bases

Strong oxidizing agents

#### **10.6. Hazardous decomposition products**

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

## **SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

The information below represents toxicological information associated with the individual components of the uncured product. Once properly mixed and/or cured, the product is safe for its intended use.

#### **11.1. Information on Toxicological effects**

##### **Signs and Symptoms of Exposure**

**Based on test data and/or information on the components, this material may produce the following health effects:**

##### **Inhalation:**

No health effects are expected.

##### **Skin Contact:**

Contact with the skin during product use is not expected to result in significant irritation.

##### **Eye Contact:**

Contact with the eyes during product use is not expected to result in significant irritation.

##### **Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

##### **Additional Health Effects:**

**Carcinogenicity:**

Exposures needed to cause the following health effect(s) are not expected during normal, intended use:

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
SILICA, CRYSTAL AIRRESP	14464-46-1	Known human carcinogen	National Toxicology Program Carcinogens
CRISTOBALITE	14464-46-1	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

**Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
VINYL POLYDIMETHYLSILOXANE	Dermal	Rabbit	LD50 > 15,440 mg/kg
VINYL POLYDIMETHYLSILOXANE	Ingestion	Rat	LD50 > 15,440 mg/kg
CRISTOBALITE	Dermal		LD50 estimated to be > 5,000 mg/kg
CRISTOBALITE	Ingestion		LD50 estimated to be > 5,000 mg/kg
DIMETHYL METHYL HYDROGEN SILICONE FLUID	Dermal	Rabbit	LD50 > 2,000 mg/kg
DIMETHYL METHYL HYDROGEN SILICONE FLUID	Ingestion	Rat	LD50 > 2,000 mg/kg
POLY(DIMETHYLSILOXANE)	Dermal	Rabbit	LD50 > 19,400 mg/kg
POLY(DIMETHYLSILOXANE)	Ingestion	Rat	LD50 > 17,000 mg/kg
SILANE TREATED SILICA	Dermal	Rabbit	LD50 > 5,000 mg/kg
SILANE TREATED SILICA	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
SILANE TREATED SILICA	Ingestion	Rat	LD50 > 5,110 mg/kg
POLYETHYLENE GLYCOL, SILOXANE TERMINATED	Dermal	Rabbit	LD50 > 2,000 mg/kg
POLYETHYLENE GLYCOL, SILOXANE TERMINATED	Inhalation-Dust/Mist (4 hours)	Rat	LC50 2 mg/l
POLYETHYLENE GLYCOL, SILOXANE TERMINATED	Ingestion	Rat	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
VINYL POLYDIMETHYLSILOXANE	Rabbit	No significant irritation
CRISTOBALITE	Professional judgement	No significant irritation
POLY(DIMETHYLSILOXANE)	Rabbit	No significant irritation
SILANE TREATED SILICA	Rabbit	No significant irritation
POLYETHYLENE GLYCOL, SILOXANE TERMINATED	Rabbit	No significant irritation

**Serious Eye Damage/Irritation**

Name	Species	Value
VINYL POLYDIMETHYLSILOXANE	Rabbit	Mild irritant
POLY(DIMETHYLSILOXANE)	Rabbit	No significant irritation
SILANE TREATED SILICA	Rabbit	No significant irritation
POLYETHYLENE GLYCOL, SILOXANE TERMINATED	Rabbit	Severe irritant

**Skin Sensitization**

Name	Species	Value
SILANE TREATED SILICA	Human and animal	Not sensitizing

POLYETHYLENE GLYCOL, SILOXANE TERMINATED	Guinea pig	Not sensitizing
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**Respiratory Sensitization**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Germ Cell Mutagenicity**

Name	Route	Value
CRISTOBALITE	In Vitro	Some positive data exist, but the data are not sufficient for classification
CRISTOBALITE	In vivo	Some positive data exist, but the data are not sufficient for classification
SILANE TREATED SILICA	In Vitro	Not mutagenic
POLYETHYLENE GLYCOL, SILOXANE TERMINATED	In Vitro	Not mutagenic
POLYETHYLENE GLYCOL, SILOXANE TERMINATED	In vivo	Not mutagenic

**Carcinogenicity**

Name	Route	Species	Value
CRISTOBALITE	Inhalation	Human and animal	Carcinogenic
SILANE TREATED SILICA	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
SILANE TREATED SILICA	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
POLYETHYLENE GLYCOL, SILOXANE TERMINATED	Ingestion	Some positive reproductive/developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 450 mg/kg/day	pre mating & during gestation

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
CRISTOBALITE	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
SILANE TREATED SILICA	Inhalation	respiratory system   silicosis	All data are negative	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.**

## SECTION 12: Ecological information

### Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

### Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

**EPA Hazardous Waste Number (RCRA):** Not regulated

## SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact 3M for more information.

### 311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

### 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

This material contains one or more substances not listed on the TSCA Inventory. Commercial use of this material is regulated by the FDA.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## SECTION 16: Other information

### NFPA Hazard Classification

**Health:** 0 **Flammability:** 1 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**Document Group:** 21-9847-1  
**Issue Date:** 02/25/16

**Version Number:** 5.00  
**Supercedes Date:** 10/09/14

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**Document Group:** 21-9846-3  
**Issue Date:** 02/25/16

**Version Number:** 4.00  
**Supercedes Date:** 04/23/15

### SECTION 1: Identification

#### 1.1. Product identifier

3M™ ESPE™ EXPRESS™ 2 ULTRA-LIGHT BODY QUICK CATALYST

#### Product Identification Numbers

LE-F100-0273-5

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Dental Product, Impression material

##### Restrictions on use

For use only by dental professionals.

#### 1.3. Supplier's details

**MANUFACTURER:** 3M  
**DIVISION:** Oral Care Solutions Division  
**ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA  
**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

#### 2.1. Hazard classification

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### 2.2. Label elements

##### Signal word

Not applicable.

##### Symbols

Not applicable.

**Pictograms**

Not applicable.

**2.3. Hazards not otherwise classified**

None.

**SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
CRISTOBALITE	14464-46-1	30 - 50 Trade Secret *
VINYL POLYDIMETHYLSILOXANE	68083-19-2	30 - 50 Trade Secret *
FUSED SILICA	60676-86-0	10 - 30 Trade Secret *
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	67762-90-7	1 - 10 Trade Secret *
POLY(DIMETHYLSILOXANE)	63148-62-9	1 - 10 Trade Secret *
TRIDYMITE	15468-32-3	< 5 Trade Secret *
QUARTZ SILICA	14808-60-7	< 0.3 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

**Skin Contact:**

Wash with soap and water. If signs/symptoms develop, get medical attention.

**Eye Contact:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

**If Swallowed:**

Rinse mouth. If you feel unwell, get medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**

See Section 11.1. Information on toxicological effects.

**4.3. Indication of any immediate medical attention and special treatment required**

Not applicable

**SECTION 5: Fire-fighting measures****5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

**5.2. Special hazards arising from the substance or mixture**

None inherent in this product.

**Hazardous Decomposition or By-Products**

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Irritant Vapors or Gases	During Combustion

### 5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Observe precautions from other sections.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

### 7.2. Conditions for safe storage including any incompatibilities

Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidizing agents. Store away from amines.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
CRISTOBALITE	14464-46-1	ACGIH	TWA(respirable fraction):0.025 mg/m <sup>3</sup>	A2: Suspected human carcin.
CRISTOBALITE	14464-46-1	OSHA	TWA concentration(as total dust):0.15 mg/m <sup>3</sup> ;TWA concentration(respirable):0.05 mg/m <sup>3</sup> (1.2 millions of particles/cu. ft.)	
QUARTZ SILICA	14808-60-7	ACGIH	TWA(respirable fraction):0.025 mg/m <sup>3</sup>	A2: Suspected human carcin.
QUARTZ SILICA	14808-60-7	OSHA	TWA concentration(as total dust):0.3 mg/m <sup>3</sup> ;TWA concentration(respirable):0.1 mg/m <sup>3</sup> (2.4 millions of particles/cu. ft.)	

TRIDYMITE	15468-32-3	OSHA	TWA concentration(as total dust):0.15 mg/m3;TWA concentration(respirable):0.05 mg/m3(1.2 millions of particles/cu. ft.)	
SILICA, AMORPHOUS	60676-86-0	OSHA	TWA concentration:0.8 mg/m3;TWA:20 millions of particles/cu. ft.	
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	67762-90-7	CMRG	CEIL:5 mg/m3	
SILICA, AMORPHOUS	67762-90-7	OSHA	TWA concentration:0.8 mg/m3;TWA:20 millions of particles/cu. ft.	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

## 8.2. Exposure controls

### 8.2.1. Engineering controls

Use in a well-ventilated area.

### 8.2.2. Personal protective equipment (PPE)

#### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields

#### Skin/hand protection

See Section 7.1 for additional information on skin protection.

#### Respiratory protection

None required.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

General Physical Form:	Solid
Specific Physical Form:	Paste
Odor, Color, Grade:	Odorless, orange
Odor threshold	<i>No Data Available</i>
pH	<i>Not Applicable</i>
Melting point	<i>No Data Available</i>
Boiling Point	<i>Not Applicable</i>
Flash Point	No flash point
Evaporation rate	<i>Not Applicable</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>

<b>Vapor Pressure</b>	<i>Not Applicable</i>
<b>Vapor Density</b>	<i>Not Applicable</i>
<b>Density</b>	$\geq 1.4 \text{ g/cm}^3$
<b>Specific Gravity</b>	$\geq 1.4$ [Ref Std: WATER=1]
<b>Solubility in Water</b>	<i>Negligible</i>
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>Not Applicable</i>
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Decomposition temperature</b>	<i>No Data Available</i>
<b>Viscosity</b>	<i>No Data Available</i>
<b>Volatile Organic Compounds</b>	<i>Not Applicable</i>
<b>Percent volatile</b>	<i>Not Applicable</i>
<b>VOC Less H<sub>2</sub>O &amp; Exempt Solvents</b>	<i>Not Applicable</i>

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Heat

### 10.5. Incompatible materials

Strong acids  
Amines  
Strong bases  
Strong oxidizing agents

### 10.6. Hazardous decomposition products

#### Substance Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

The information below represents toxicological information associated with the individual components of the uncured product. Once properly mixed and/or cured, the product is safe for its intended use.

## 11.1. Information on Toxicological effects

### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### Inhalation:

No known health effects.

#### Skin Contact:

Contact with the skin during product use is not expected to result in significant irritation.

#### Eye Contact:

Contact with the eyes during product use is not expected to result in significant irritation.

#### Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

### Additional Health Effects:

#### Carcinogenicity:

Exposures needed to cause the following health effect(s) are not expected during normal, intended use:

Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation
SILICA, Crys Airresp	14464-46-1	Known human carcinogen	National Toxicology Program Carcinogens
SILICA, Crys Airresp	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens
SILICA, Crys Airresp	15468-32-3	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
SILICA, Crys Airresp	15468-32-3	Known human carcinogen	National Toxicology Program Carcinogens
CRISTOBALITE	14464-46-1	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
QUARTZ SILICA	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

### Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

### Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
VINYL POLYDIMETHYLSILOXANE	Dermal	Rabbit	LD50 > 15,440 mg/kg
VINYL POLYDIMETHYLSILOXANE	Ingestion	Rat	LD50 > 15,440 mg/kg
CRISTOBALITE	Dermal		LD50 estimated to be > 5,000 mg/kg
CRISTOBALITE	Ingestion		LD50 estimated to be > 5,000 mg/kg
FUSED SILICA	Dermal	Rabbit	LD50 > 5,000 mg/kg
FUSED SILICA	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
FUSED SILICA	Ingestion	Rat	LD50 > 5,110 mg/kg
POLY(DIMETHYLSILOXANE)	Dermal	Rabbit	LD50 > 19,400 mg/kg
POLY(DIMETHYLSILOXANE)	Ingestion	Rat	LD50 > 17,000 mg/kg
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Dermal	Rabbit	LD50 > 5,000 mg/kg
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Ingestion	Rat	LD50 > 5,110 mg/kg
TRIDYMITE	Dermal		LD50 estimated to be > 5,000 mg/kg

TRIDYMITE	Ingestion	LD50 estimated to be > 5,000 mg/kg
QUARTZ SILICA	Dermal	LD50 estimated to be > 5,000 mg/kg
QUARTZ SILICA	Ingestion	LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
VINYL POLYDIMETHYSILOXANE	Rabbit	No significant irritation
CRISTOBALITE	Professional judgement	No significant irritation
FUSED SILICA	Rabbit	No significant irritation
POLY(DIMETHYLSILOXANE)	Rabbit	No significant irritation
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Rabbit	No significant irritation
TRIDYMITE	Professional judgement	No significant irritation
QUARTZ SILICA	Professional judgement	No significant irritation

#### Serious Eye Damage/Irritation

Name	Species	Value
VINYL POLYDIMETHYSILOXANE	Rabbit	Mild irritant
FUSED SILICA	Rabbit	No significant irritation
POLY(DIMETHYLSILOXANE)	Rabbit	No significant irritation
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Rabbit	No significant irritation

#### Skin Sensitization

Name	Species	Value
FUSED SILICA	Human and animal	Not sensitizing
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Human and animal	Not sensitizing

#### Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

#### Germ Cell Mutagenicity

Name	Route	Value
CRISTOBALITE	In Vitro	Some positive data exist, but the data are not sufficient for classification
CRISTOBALITE	In vivo	Some positive data exist, but the data are not sufficient for classification
FUSED SILICA	In Vitro	Not mutagenic
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	In Vitro	Not mutagenic
TRIDYMITE	In Vitro	Some positive data exist, but the data are not sufficient for classification
TRIDYMITE	In vivo	Some positive data exist, but the data are not sufficient for classification
QUARTZ SILICA	In Vitro	Some positive data exist, but the data are not sufficient for classification
QUARTZ SILICA	In vivo	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
CRISTOBALITE	Inhalation	Human and animal	Carcinogenic
FUSED SILICA	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification
TRIDYMITE	Inhalation	Human and animal	Carcinogenic
QUARTZ SILICA	Inhalation	Human and animal	Carcinogenic

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
FUSED SILICA	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
FUSED SILICA	Inhalation	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
FUSED SILICA	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

**Target Organ(s)****Specific Target Organ Toxicity - single exposure**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
CRISTOBALITE	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
FUSED SILICA	Inhalation	respiratory system   silicosis	All data are negative	Human	NOAEL Not available	occupational exposure
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	Inhalation	respiratory system   silicosis	All data are negative	Human	NOAEL Not available	occupational exposure
TRIDYMITE	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
QUARTZ SILICA	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

**Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.**

## SECTION 12: Ecological information

### Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

### Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

**EPA Hazardous Waste Number (RCRA):** D007 (Chromium)

## SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations

Contact 3M for more information.

#### 311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

### 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

This material contains one or more substances not listed on the TSCA Inventory. Commercial use of this material is regulated by the FDA.

Contact 3M for more information.

### 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health: 0 Flammability: 1 Instability: 0 Special Hazards: None**

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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